

# Sheep

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## Fundamental Knowledge and Skills

Listed below are specific learning outcomes that are relevant for achieving success as an intermediate in the 4-H Sheep Project. Mastery of the intermediate level learning outcomes includes mastery of the beginner level learning outcomes. The combined beginner and intermediate skills will provide the foundation for success in the 4-H Sheep Project at an advanced level in the future. It is important to note that many of these learning outcomes are applicable for learning about other species as well.

## General Industry and Terminology

- Define the following wool terms: crimp, staple length, yolk, dark fiber, kemp, tender wool, clip.
- Label the following parts and regions of the body: breast, point of shoulder, top of shoulders, forerib, sheath, testicles, udder, dew claw.

## Health and Welfare

- Define the following terms: analgesic, anthelmintic, immunity, biosecurity, prevention vs. treatment of disease, de-wormer, dehydration, drug residue, mineral toxicity.
- Use medicine label in order to calculate dosage rate and withdrawal time.
- Demonstrate how to give a subcutaneous and intramuscular injection and how to properly discard needle.
- Describe the following diseases in sheep: coccidiosis, enterotoxaemia, copper toxicity, bloat, tetanus, pneumonia.

## Nutrition and Feeding

- Define the following terms: carbohydrate, starch, fat, fiber, roughage, nonprotein nitrogen, forage quality, vitamins, minerals, creep feeding, rotational grazing.
- Label the major sections of the gastrointestinal tract: mouth, esophagus, rumen, reticulum, abomasum, omasum, small intestines, large intestines.
- Identify the following forages from samples: bermudagrass, Kentucky bluegrass, crabgrass, annual ryegrass, timothy.
- Identify the following feedstuffs from samples: cracked corn, ground corn, distiller's grain, whole wheat, wheat middlings, whole barley, whole oats, rolled oats, sorghum (milo), beat pulp, limestone, urea, dried and liquid molasses.



## Sheep Intermediate Outcomes

- Differentiate between low and high-quality hay by visual appraisal and by forage quality data.
- Analyze a feed tag for ingredients, nutrient analysis and medicated status.

## Reproduction

- Define the following terms: seasonal breeders, anestrus, puberty, photoperiod, teaser ram, dystocia.
- Label the following parts of a reproductive tract and match them to gender: ovary, penis, sheath, testicles, uterus, vulva, vagina, cervix.
- Outline the basic steps in and understand the benefits of artificial insemination and embryo transfer.

## Genetics and Selection

- Compare and contrast the purposes for each of the following breeds: Cheviot, Columbia, Corriedale, Horned Dorset, Katahdin, Lincoln, Texel, Tunis.
- Define the following terms: genotype, phenotype, dominant gene, recessive gene, inbreeding, outcrossing.
- Be able to use scrapie genetic testing information (codon 171).
- Define Estimated Breeding Values (EBV) and explain how they are used in sheep selection programs.

## Carcass and Lamb Products

- Classify the following retail cuts of a lamb carcass and be able to match them to their corresponding wholesale cut: Denver style ribs, leg center slice, frenched style roast, leg roast (boneless), sirloin chops, loin chops, loin roast, rib chops, rib roast, arm chops, blade chops.
- Define the following terms: live weight, hot carcass weight, back fat thickness, loin eye area, dressing percentage, yield grade, quality grade.
- Distinguish between lamb carcass and mutton carcass.

## Equipment and Recordkeeping

- Identify the following equipment used in sheep production: cauterizing tail docker, drench gun, elastrator, lamb boot, lamb tube feeder, prolapse ring retainer, scalpel, shearers, screwdriver, transfer needle, vacutainer.
- Maintain records of sheep operation and use them to make management decisions.

## Extra Learning Opportunities

Listed below are contests and other activities where youth have the opportunity to showcase what they have learned in the 4-H Sheep Project.

- 4-H Portfolio.
- 4-H Junior High Academic Conference.
- 4-H Round-Up.
- Youth for the Quality Care of Animals Certification.
- Assist Younger Youth.
  - Encourage other youth to participate in the 4-H sheep project.
  - Help other youth with showmanship or with learning skillathon topics.
- Livestock Skillathon Contest.
- Livestock Judging Contest.
- Quiz Bowl.
- Sheep Show and Showmanship.

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